

##C540204 : MAJOR EDUCATIONAL STATISTICS

KEY WORD: TYPE I ERROR / POWER OF TEST / CORRELATION COEFFICIENT

SURIN UNGKURAWIROT : ABILITY TO CONTROL TYPE I ERROR, AND POWER OF TEST STATISTICS FOR SPEARMAN'S AND PEARSON'S CORRELATION COEFFICIENTS FOR RATING SCALE DATA. THESIS ADVISOR : ASST. PROF. DEREK SRISUKHO, PH.D. 90 pp. ISBN 974-584-218-4

The purposes of this research were to study the ability to control Type I error and power of test statistics for Spearman's and Pearson's correlation coefficients for the analysis of rating scale data which were determined with their statistical significances when the population studied in this research was the bivariate normal distribution, and the correlation coefficients of each pair of variables were 0.0, 0.1, 0.2, ..., 0.9.

Monte Carlo Simulation technique was used in this study by simulating data through computer for the sample size of 50, 100, 150, 200.

The findings could be summerized as follow;

1. The Spearman's and Pearson's test statistics correlation coefficients can control Type I error at any studied cases.
2. Power of test statistics for Spearman's and Pearson's correlation coefficients are not different at any studied cases.